

AR02

ZENMAC

METAL MINES LIMITED



ANNUAL REPORT **1969**

Zenmac Metal Mines Limited

Directors

K. A. Davis, Toronto, Ontario
R. A. Halet, Ph.D., P.Eng., Toronto, Ontario
Patrick Harrison, Toronto, Ontario
E. R. Heald, Toronto, Ontario
Wm. McKee, Toronto, Ontario

Officers

R. A. Halet, president and managing director
K. A. Davis, vice-president and secretary-treasurer
P. S. Broadhurst, B.Sc., P.Eng., general manager,
Zenith operation

Transfer Agent and Registrar

Crown Trust Company, 302 Bay Street,
Toronto, Ontario

Auditors

Halladay, Robinson & Company,
111 Jarvis Street, Toronto, Ontario

Shares Listed

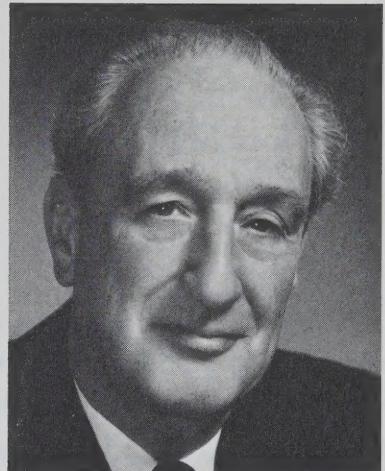
The Toronto Stock Exchange

Authorized Capital

10,000,000 common shares, par value \$1 each
Issued and outstanding: 6,415,755 shares

Concentrates are loaded
for shipment at the Zenith
mine siding, bound for
Bartlesville, Oklahoma.





R. A. Halet, President

To the Shareholders:

Your directors are pleased to present to you the financial statements of the company for the year ended December 31, 1969, and the report of the general manager of mining operations.

The Zenith Mine and concentrator operated continuously throughout the year at an average rate of 96 tons per day. Shipments were 8,277 tons of zinc concentrate and 171 tons of copper concentrate which yielded a net smelter return of \$546,590, or \$15.50 per ton milled. There have been two increases in the price of zinc during the year, from 13.5¢ per pound at the beginning of the year to 15.5¢ where it remains at the date of this report. Mine operating costs were \$499,147, or \$14.15 per ton milled. The cash flow was more than consumed by exploration expenditures which amounted to \$66,671.

Within Zenmac's limited resources an active program of exploration has been maintained, with first priority being given to the Schreiber area where your company holds more than 300 claims and the Zenith mine concentrator and operating staff are located.

Nicopor Project

Some very interesting results have been obtained in recent drilling on the Nicopor showing, some seven miles northwest of Schreiber. This is on claims staked several years ago to cover a known nickel-copper showing. This deposit was considered to be small and low-grade. However, when the price of nickel was increased to \$1.28 per pound in the latter part of 1969, the prospect became more interesting. Eight diamond drill holes were completed in December.

The deposit occurs on the contact of a gabbro with an underlying granite. Drilling has shown that the mineralization persists to at least 400 feet below the outcrop, approximately 250 feet vertical depth, and appears to be getting stronger. The four drill holes which intersected the deposit at this horizon show a strike length of at least 300 feet with disseminated mineralization about 30 feet in thickness and with a central core ranging from seven to 15 feet in thickness assaying approximately 1.0% nickel and 0.3% copper.

There is a strong possibility of outlining an ore body at this location, especially as it is within eight miles by road from the concentrator.

Other Programs

As reported in the 1968 annual report, your company participated in a syndicate which staked claims in the Confederation Lake and Kennedy Lake areas, Red Lake Mining Division. Airborne surveys did not disclose interesting anomalies and no further work is planned.

Underground development was continued throughout the year by Siscoe Metals of Ontario Limited on the Manridge property in the Gowganda District. The ore is being stockpiled at the mine until there is enough for a mill-run of several thousand tons. This is expected in the near future.

No work has been done during the past year on the Irish property, or on the 502 claims of the Mississagi and Matinenda syndicates in the area west of the Elliot Lake uranium district. However, some encouraging results have been obtained by Cominco Limited and Consolidated Morrison Explorations Limited in Township 168, within a relatively short distance of the eastern portion of this claim group. Developments are being watched with great interest.

The company retains two claim groups covering the Zinc Lake prospect, 50 miles northwest of Sudbury. A zone more than a

mile long and several hundred feet wide contains sulphides of iron with some zinc, lead and copper. The zone requires testing at greater depth, since shallow drilling has not disclosed commercial grade.

Your company, in equal partnership with New Calumet Mines Limited, has purchased outright from the stakers a group of 70 claims in the active Sturgeon Lake area, approximately 12 miles west of the important base metal discovery of Mattagami Lake Mines Limited. An airborne geophysical survey, recently completed, by Questor Surveys Limited, shows four strong anomalies which will be examined on the ground as soon as the snow has melted.

The directors are grateful for the support of the company's loyal shareholders through the past years. We trust that at this stage when Zenmac Metal Mines is organizing new exploration projects this valued support will be continued.

On behalf of the board,

R. A. HALET,
President.

Toronto, Ontario
March 20, 1970

Report of the GENERAL MANAGER

A summary of operations at the Zenith Mine for the fiscal year ending December 31, 1969, is respectfully submitted.

The concentrator treated 35,283 tons of ore with a calculated head of 13.24% zinc.

There were 8,277 short dry tons of zinc concentrates shipped to National Zinc Corporation at Bartlesville, Okla. For the first time a copper concentrate was produced and 171 short dry tons were shipped to Hudson Bay Mining and Smelting Co. Limited at Flin Flon, Manitoba.

Metal sales included 8,628,000 lbs. of zinc, 60,767 lbs. of copper and 22,280 lbs. of cadmium.

In addition 21.5 ozs. of gold and 556.4 ozs. of silver were recovered from the copper concentrates.

The grade of zinc concentrates was 52.12% zinc and 0.135% cadmium. The grade of copper concentrate was 17.76% copper.

The mill operated 87.67% of possible time and the average tonnage processed was 69.19 tons per calendar day. Recovery of zinc was 92.81%.

Mining Reserves:

Underground operations were confined to a single shift basis throughout the year, a system which was advantageous both in efficiency and cost reduction.

A total of 29,567 tons was mined, all from stoping of known ore structures. There were

70 feet of drifting and 53 feet of raising completed in stope development. There were 3,793 feet of diamond drilling completed as an aid in stope delineation.

A total of 174,746 tons have been mined and processed to the end of 1969. Reserves were extended because of two increases in the price of zinc during the year, from 13½ cents to 15½ cents a pound.

Lower grade tonnages above the first level were placed in an ore category and represented the bulk of production. Current reserves are estimated to permit continuing operations on a salvage basis to April, 1970.

General:

The daily operating force averaged 37. There has been a minimum of labour turnover and labour relations have been excellent in all departments. The co-operation of staff and employees during the year has been a factor in keeping operations going.

The support and assistance of the executive officers and directors of the company have been most gratifying.

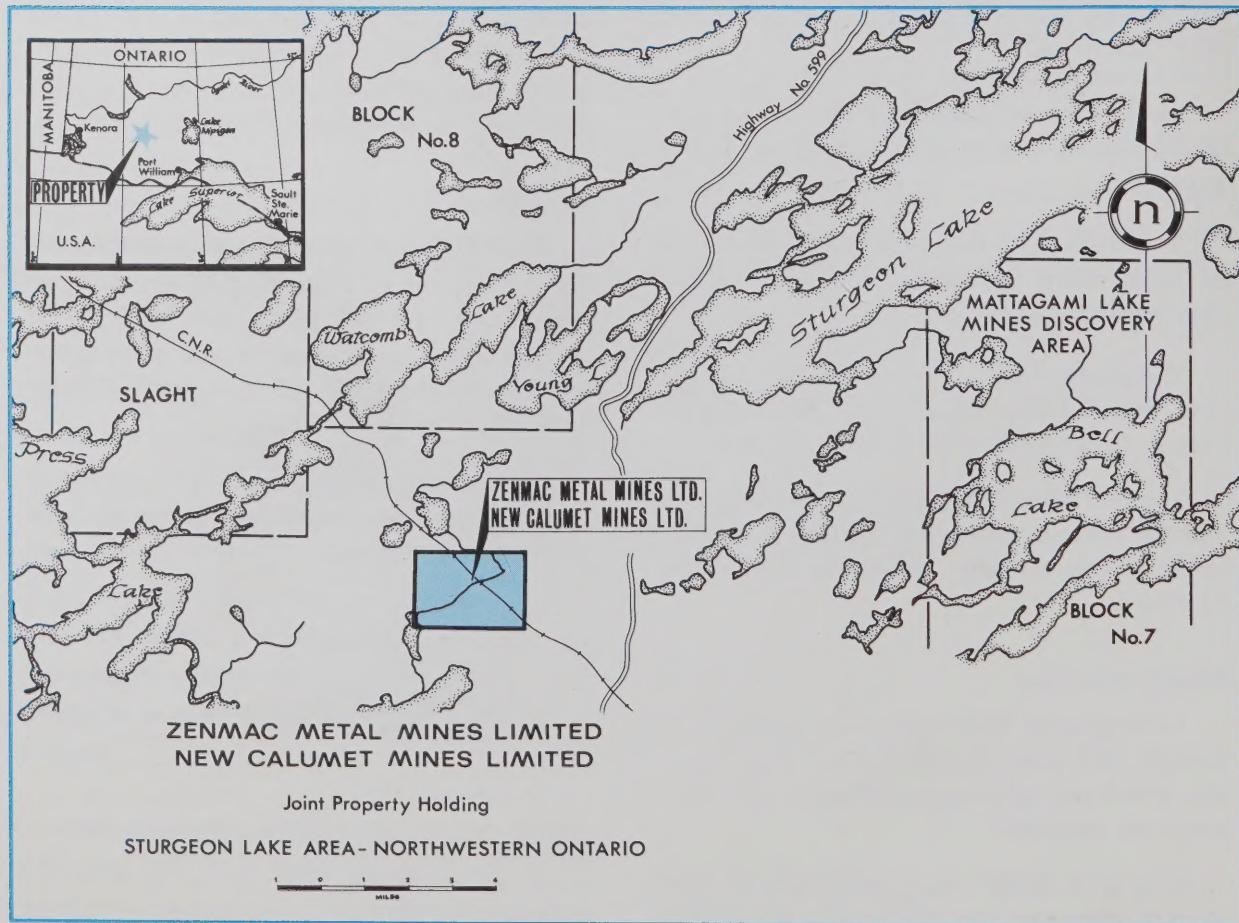
P. S. Broadhurst, P.Eng.
General Manager.

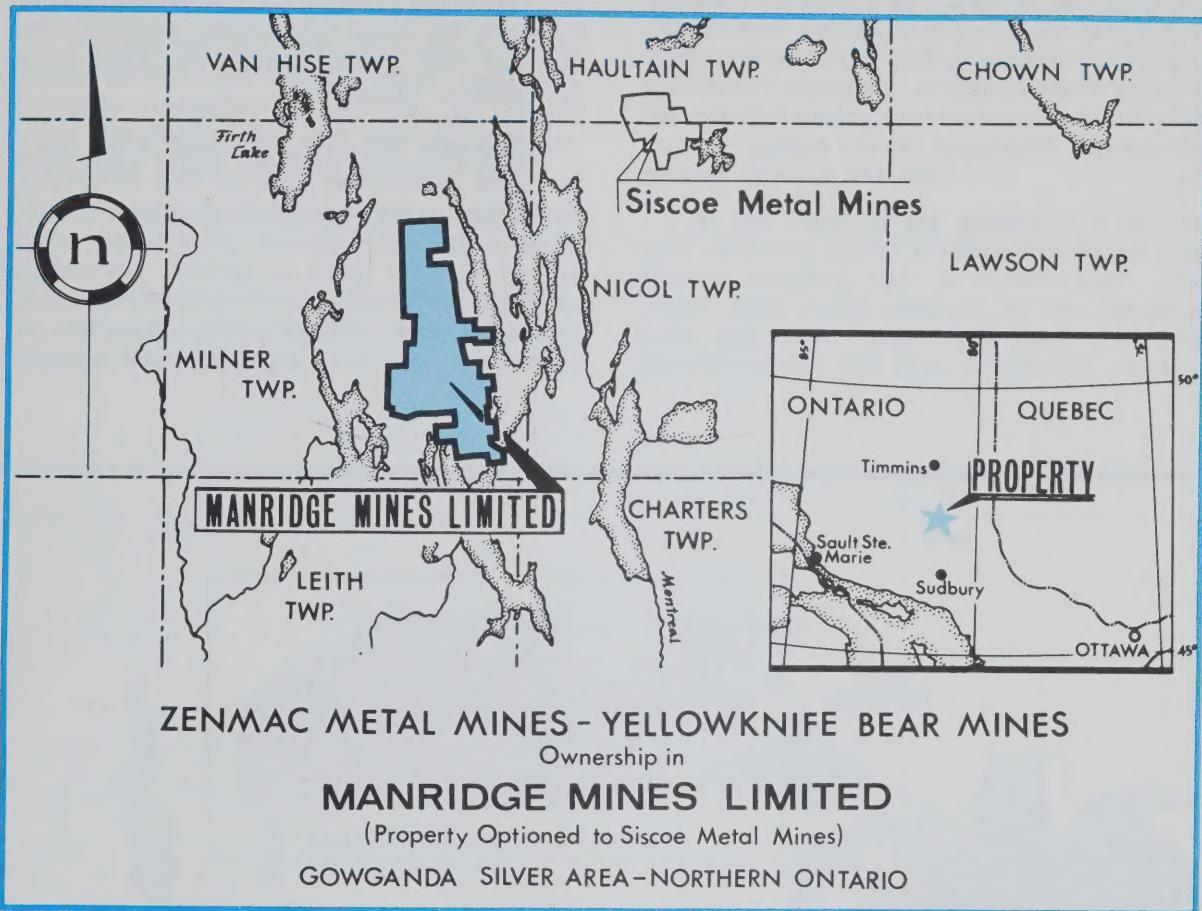
STURGEON LAKE AREA

The location of the 70-claim group which was purchased outright from the stakers, and is held jointly (50-50) with New Calumet Mines Limited, is shown on this sketch map. This is presently the most active exploration area in Ontario as a result of the recent discovery of major base metal deposits by Mattagami Lake Mines on lands of Abitibi Pulp and Paper Company. The Mattagami Lake finds are on

the same volcanic belt some 12 miles to the east.

An airborne electromagnetic and magnetometer survey has just been completed by Questor Surveys. Some highly interesting anomalies have been disclosed and these will be investigated on the ground when the snow has melted this spring.





MANRIDGE MINES LIMITED

Zenmac holds approximately 40% interest in this company which holds a large group of silver claims in Milner Township, Gowganda District. A major diamond drilling program was carried out on these claims by Zenmac in 1966 and 1967, following work by Yellowknife Bear Mines Limited.

This work indicated numerous silver deposits of probable economic importance. Subsequently, an agreement was made with Siscoe Metals Limited in 1968 for underground development under an option to lease. Siscoe Metals has been operating silver mines and a concentrator in the district for the past twenty years, or more.

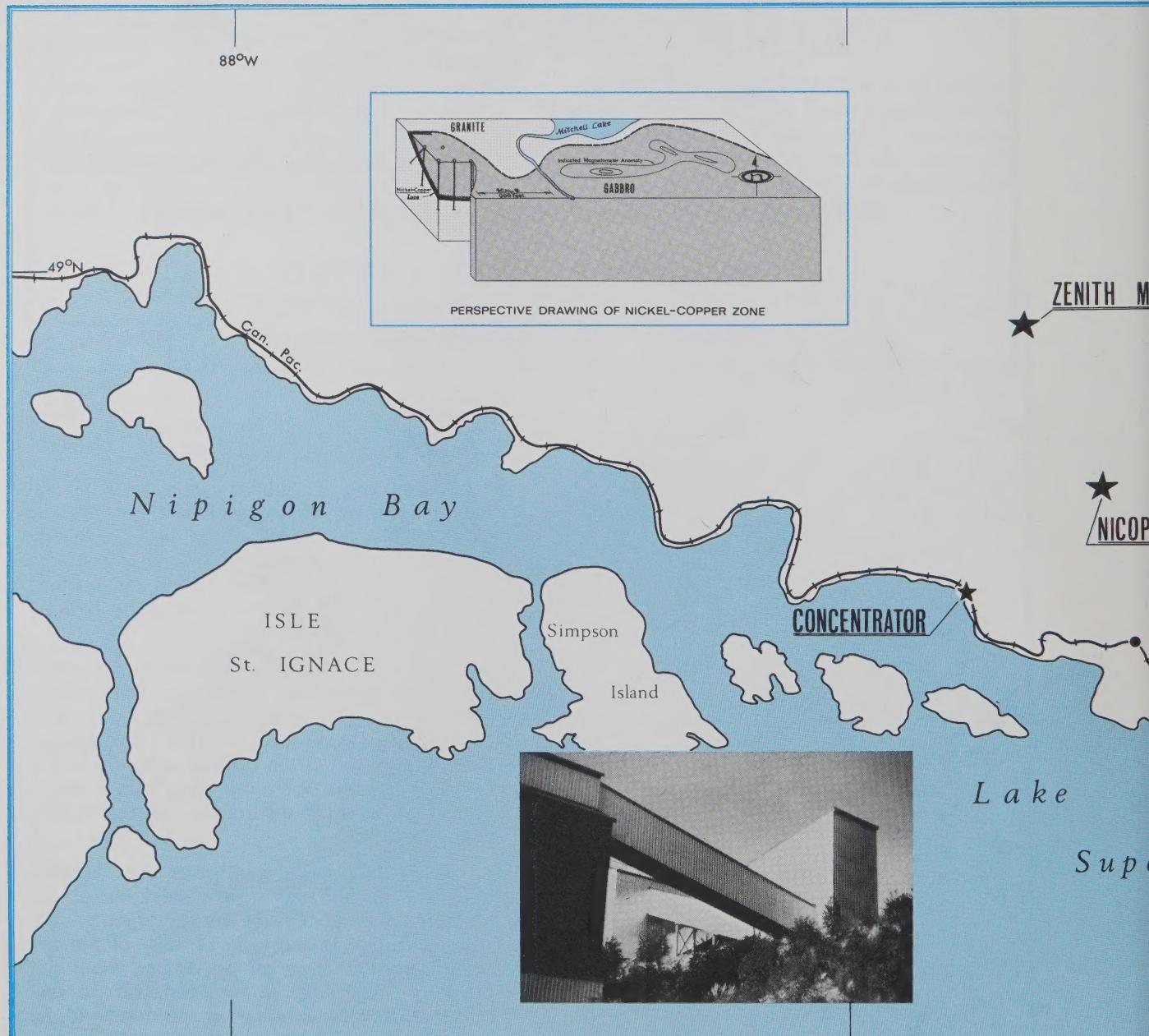
Siscoe has been exploring the deposits underground and has now a stockpile of ore ready for milling. Under the agreement, Manridge will receive a royalty of 10% of the net smelter returns from all ore mined from the property. Manridge in turn proposes to disburse all royalty income as dividends to its shareholders.

SCHREIBER AREA PROJECTS

The sketch map on this page shows the location of the Zenith mine, the Nicopor nickel prospect, the Ansel Lake copper prospect, the Pyramid zinc prospect and the Owl Lake molybdenite prospect.

More than 300 claims are held in this area, in a well mineralized volcanic belt which has received very little prospecting since the early days.

The Zenith mine is almost worked out, after four years of continuous operation in which the recovery of metal will closely



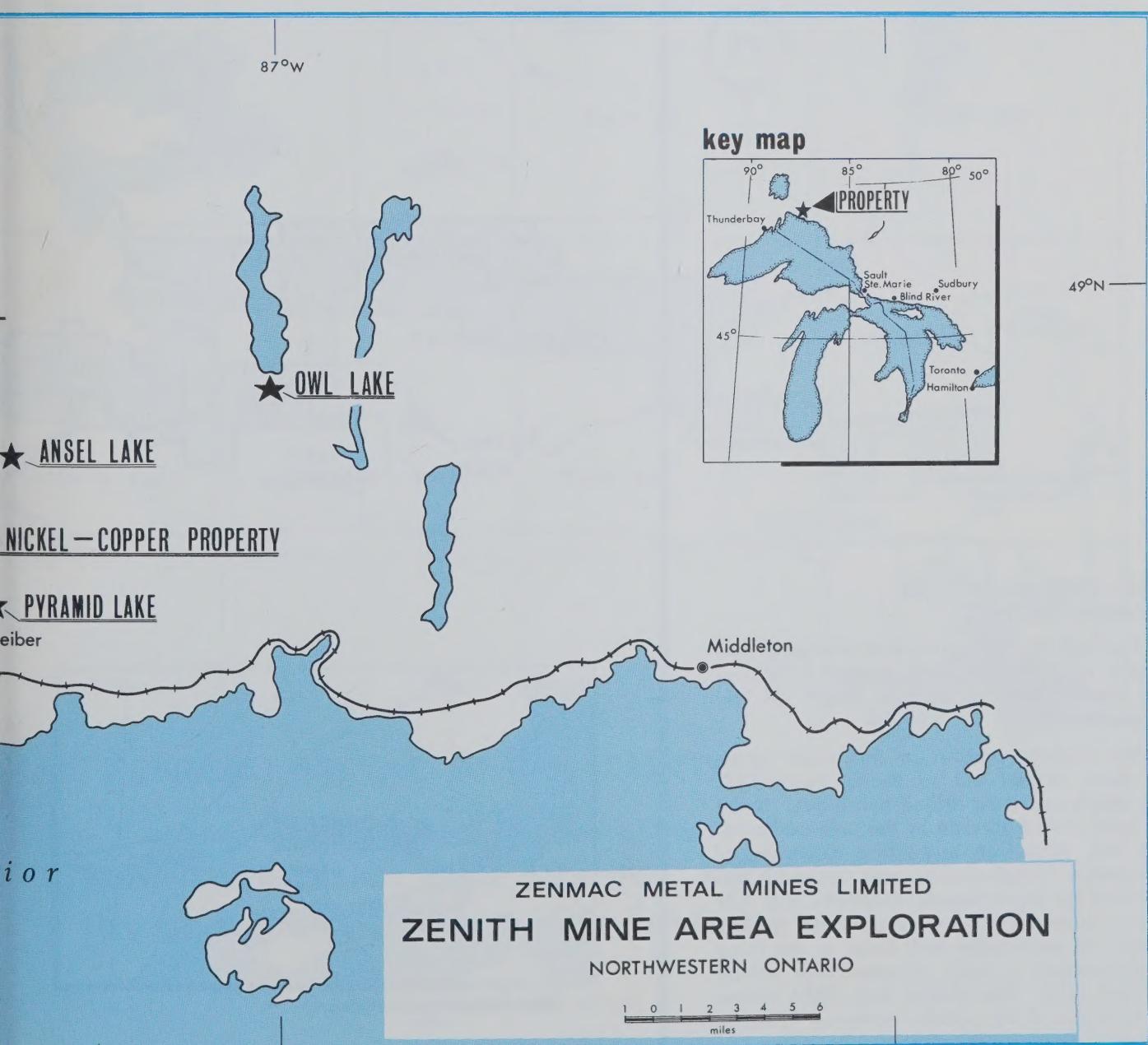
approximate the ore reserve as originally estimated.

The Owl Lake molybdenite property is held jointly (50-50) with Pipawa Mines Limited, a company controlled by Dr. Franc R. Joubin. Some geophysical and geochemical investigations were made on these claims in 1969.

The Nicopor nickel prospect, on which some encouraging results were obtained in exploratory drilling in 1969, will be further explored in 1970. This prospect is favourably situated, some three miles from the concentrator at Selim Siding.

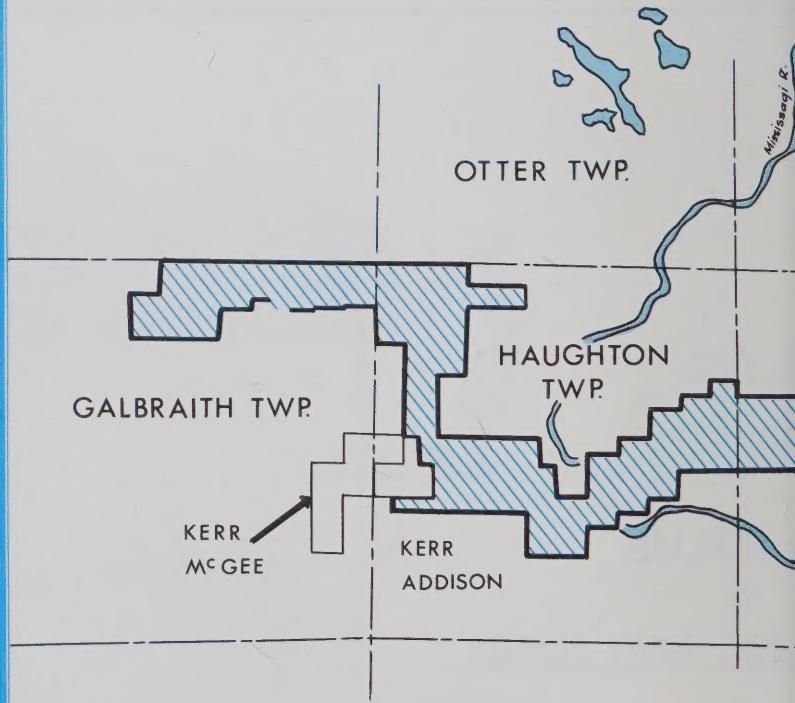
The geological setting of the Nicopor prospect are shown on the accompanying plan. The deposit occurs at the contact between a gabbro-diorite mass and an underlying granite; it does not respond to electromagnetic surveys. No detailed geology has been done in this area but the gabbro diorite apparently extends for several miles to the east.

To the south of the gabbro is a belt of acid volcanics, which contains the Ansel Lake copper prospect near its eastern end. The major base metal deposits in the Sturgeon Lake and other base metal areas (Noranda District) favour this type of volcanic rocks.



MATINENDA GROUP

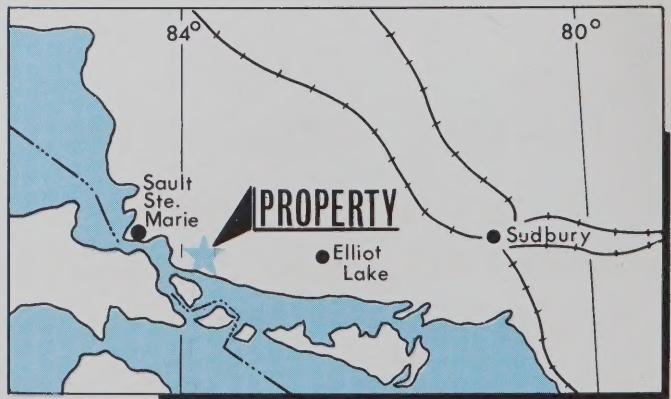
MISSISSAGI GROUP

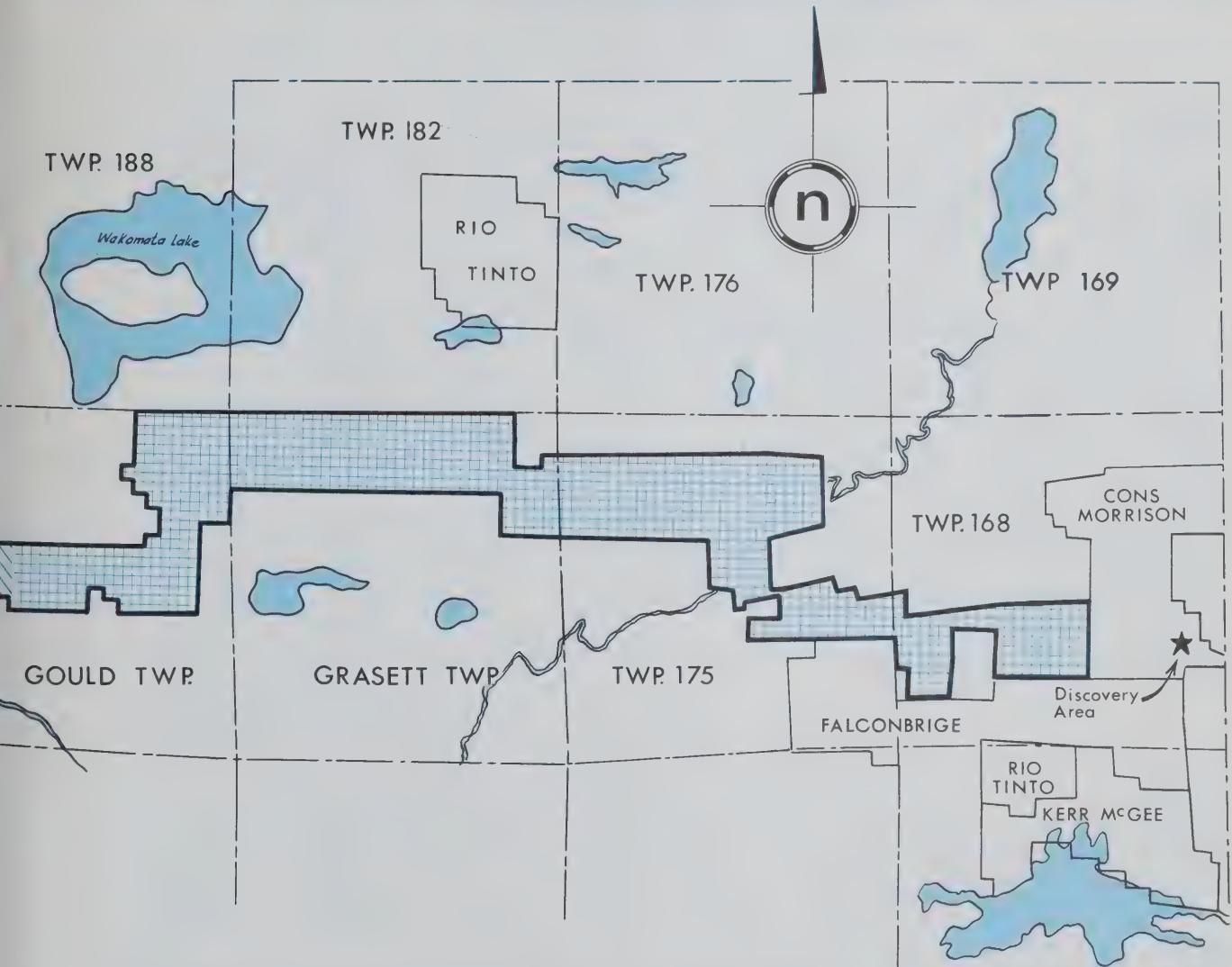


BLIND RIVER-ELLIOT LAKE URANIUM DISTRICT

Through the Matinenda and Mississagi syndicates, approximately 22% interest is held in 502 claims along a 30-mile length of the favorable zone.

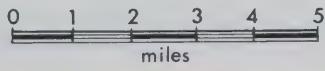
The easterly portion of this claim block has been farmed out to Pacific Petroleum Ltd. which has so far drilled two holes. None has been drilled to date in the area of Township 168, where an interesting discovery of radioactive conglomerate was recently announced by Consolidated Morrison and Cominco; these companies are presently drilling a series of exploratory drill holes in the hope of discovering a major uranium area similar to Elliot Lake. The sketch map, right, shows the location of the various company holdings and exploratory drill holes.





ZENMAC METAL MINES LIMITED

Claim Interests in the Extension of the
BLIND RIVER-ELLIOT LAKE URANIUM AREA
 Through Matinenda and Mississagi Syndicates



Zenmac Metal Mines Limited

(Incorporated under the laws of the Province of Ontario)

Balance Sheet as at 31 December, 1969

(with 1968 figures for comparison)

	A S S E T S	
Current		
Cash in banks	\$ 44,082	\$ 72,448
Accounts receivable	29,209	34,977
Concentrate Settlements receivable	101,835	50,795
	<hr/>	<hr/>
	175,126	158,220
Mining assets, at cost		
Claim interests less \$160,000 written off	25,000	34,948
Buildings less \$384,848 depreciation (1968 — \$314,313)	108,897	38,362
Equipment less \$468,896 depreciation (1968 — \$380,086)	152,643	64,388
Deferred expenditures (\$200,123 amortized — 1968)	16,077	
Inventory of supplies	14,228	4,820
Prepaid expenses	6,340	5,101
	<hr/>	<hr/>
	323,185	147,619
Investments		
Securities at cost and nominal values	38,394	3
Manridge Mines Limited, shares and advances	188,989	188,989
Grubstake syndicate participations	14,972	
	<hr/>	<hr/>
	242,355	188,992
Lease interests less \$159,108 written off	25,000	25,000
	<hr/>	<hr/>
	\$ 765,666	\$ 519,831
	L I A B I L I T I E S	
Current		
Wages payable	\$ 14,678	\$ 8,540
Income tax deductions	4,233	3,259
Accounts payable	89,297	51,845
	<hr/>	<hr/>
	108,208	63,644
Capital		
Authorized — 10,000,000 shares of \$1 par value		
Issued and fully paid — 6,415,755 shares	6,415,755	6,415,755
Less: Discount thereon	4,493,715	4,493,715
	<hr/>	<hr/>
	1,922,040	1,922,040
Deficit — per statement	1,264,582	1,465,853
Net equity	657,458	456,187
	<hr/>	<hr/>
	\$ 765,666	\$ 519,831

Approved on behalf of the Board of Directors

R. A. HALET, Director
K. A. DAVIS, Director

STATEMENT OF OPERATIONS AND DEFICIT

For the Year Ended 31 December 1969

(with 1968 figures for comparison)

Income	<u>1968</u>	<u>1969</u>
Metal production less smelter, duty and freight	\$ 749,662	\$ 501,286
Exchange on metal settlements	21,850	45,304
Sundry items	7,068	6,549
	<u>778,580</u>	<u>553,139</u>
Expenses		
Mine operating costs	743,556	499,148
Ontario gas lease rentals	1,113	783
Ontario mineral exploration	11,218	53,987
Head office expense	34,321	21,596
	<u>790,208</u>	<u>575,514</u>
Loss before provision for recovery of capital costs and other items	\$ 11,628	\$ 22,375
Depreciation of buildings	70,535	70,535
Depreciation of equipment	88,660	88,810
Deferred expenditures amortized	87,588	16,076
Loss (gain) on investments	1,659	(11,800)
Loss on sale of equipment	3,412	
Write down of mining claims	160,000	
Write down of oil and gas leases	159,108	
Write off grubstake syndicate participations		22,666
Income tax refund		(7,391)
Net loss for the year	<u>582,590</u>	<u>201,271</u>
Balance of deficit at 1 January	<u>681,992</u>	<u>1,264,582</u>
Balance of deficit at 31 December	<u><u>\$1,264,582</u></u>	<u><u>\$1,465,853</u></u>

Note:

The aggregate direct remuneration paid to directors and senior officials of the company during the year was \$67,700, including mine management and senior staff at the mine. (1968 — \$66,787).

STATEMENT OF SOURCE AND APPLICATION OF FUNDS

For the Year Ended 31 December 1969

(with 1968 figures for comparison)

	<u>1968</u>	<u>1969</u>
Working capital (deficiency) at 1 January	\$ (31,227)	\$ 66,918

Source of funds

Income per statements	778,580	553,139
Sale of investments	131,472	66,448
Decrease in inventory	3,791	9,408
Sale of equipment	13,380	
Decrease in prepaid expense		1,239
Income tax refund		7,391
Total funds available	<u>895,996</u>	<u>704,543</u>

Application of funds

Expenses per statement	790,208	575,514
Expenditures re Manridge Mines	10,625	
Purchase of equipment	12,296	555
Grubstake syndicate participations	3,932	7,694
Purchase of investments	11,282	16,256
Increase in prepaid expense	735	
Purchase of mining claims		5,000
Staking mining claims		4,948
	<u>829,078</u>	<u>609,967</u>
Working capital at 31 December	<u>\$ 66,918</u>	<u>\$ 94,576</u>

AUDITORS' REPORT

To the Shareholders of
Zenmac Metal Mines Limited

We have examined the attached balance sheet of Zenmac Metal Mines Limited as at 31 December, 1969, and the related statements of operations and deficit and source and application of funds for the year ended on that date. Our examination included a general review of accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the attached balance sheet and related statements of operations and deficit and source and application of funds present fairly the financial position of the company at 31 December, 1969, and the results of its operations and the source and application of funds for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Ontario,
22 January, 1970.

HALLADAY, ROBINSON & COMPANY,
Chartered Accountants.



Map above indicates the range of Zenmac's mineral prospects in the province.

Zenmac Metal Mines Limited

1969 ANNUAL REPORT



Printed in Canada.

STATEMENT OF OPERATIONS
For the Six Months Ended 30 June 1969
 (with 1968 figures for comparison)

	1969	1968
INCOME		
Metal production less smelter, duty and freight charges of \$352,099 (1968 — \$420,627)	\$ 287,647	\$ 412,792
Sundry items	23,548	19,512
	<u>311,195</u>	<u>432,304</u>
EXPENSES		
Mine operating costs	267,299	388,654
Ontario gas lease rentals	683	1,008
Ontario mineral exploration	16,383	3,200
Head office expenses	9,676	21,051
	<u>294,041</u>	<u>413,913</u>
Gain before provision for re- covery of capital costs and other items	17,154	18,391
Depreciation of buildings	35,267	70,526
Depreciation of equipment	44,330	91,353
Deferred expenditures amortized	16,076	47,708
Loss (gain) on investments	(6,236)	1,614
	<u>89,437</u>	<u>211,201</u>
Net loss for the period	<u>\$ 72,283</u>	<u>\$ 192,810</u>

Note:

Depreciation is being charged in 1969 at one-half normal rate in view of the extended life of the mine and the anticipated residual value of the assets.

**STATEMENT OF SOURCE AND
APPLICATION OF FUNDS**

For the Six Months Ended 30 June 1969
 (with 1968 figures for comparison)

	1969	1968
Working capital (deficiency) to open	\$ 66,918	\$ (31,228)
SOURCE OF FUNDS		
Sale of investments	33,208	131,473
Gain before provision for re- covery of capital costs	17,154	18,391
Sale of mining assets		56
Reduction of prepaid expenses		3,686
Reduction of inventory	9,367	
Total funds available ..	<u>126,647</u>	<u>122,378</u>
APPLICATION OF FUNDS		
Investment in Matinenda Syndicate	54	3,477
Investment in Red Lake Syndicate	5,055	
Expenditures re Manridge Mines		5,969
Purchase of mining assets		168
Purchase of investments		11,283
Increase of inventory		1,934
Increase of prepaid expenses	1,494	
	<u>6,603</u>	<u>22,831</u>
Working capital to close	<u>\$ 120,044</u>	<u>\$ 99,547</u>

(This is not an audited statement)

**ZENMAC
METAL
MINES
LIMITED**

INTERIM REPORT

FOR SIX MONTHS ENDED
JUNE 30, 1969

ZENMAC METAL MINES LIMITED

To the Shareholders:

The mine and concentrator near Schreiber, Ontario, operated continuously during the period with the following results:

Tons milled	18,319
Average daily tonnage	101
Average grade of ore	15.1% zinc
Zinc concentrate shipped	4,901.98 tons
Zinc content of concentrate	5,183,354 lbs.
Net smelter return per pound of zinc	5.55¢
Copper concentrate shipped	51.92 tons

Metal content of copper concentrate:

Copper	21,058 lbs.
Gold	7.009 ounces
Silver	222.73 ounces

There have been two increases of one half cent each in the quoted price of zinc during the period. This has extended the life of the mine beyond original expectations. Operations will be continued as long as a cash profit is earned, but it is expected that ore reserves will be exhausted by the year-end. No further exploration is contemplated in the mine.

Five holes were drilled in February to explore an interesting copper-zinc showing on the Pyramid property near Schreiber. A single hole was drilled to test an EM anomaly on the Cleaver Lake Fault zone about two miles from the mine. No ore was found by this drilling.

Siscoe Mines Limited has been conducting an underground development program on the silver property of Manridge Mines Limited in the Gowganda district of Ontario. Some production may be expected in the second half of the current year.

Your company holds approximately 40% of the issued capital of Manridge Mines Limited and, under the agreement with Siscoe, Manridge is to receive a royalty of 10% of the net smelter return from all ore mined from the property.

For the past several weeks, management has been investigating and negotiating for an interest in a group of properties in Salter township, Sudbury district, near the village of Massey, Ontario. One of these properties is currently shipping 60 tons of copper ore per day to a custom mill. Two other properties in the group have produced copper ore in the period 1900-1910.

Management believes that these properties have interesting possibilities and a comprehensive report is to be obtained from an independent engineer to provide a sound basis for the operation and financing of an exploration and development program. It is hoped to have this project underway in the very near future.

Respectfully submitted,

R. A. HALET,
President.

Toronto, Ontario,
August 15, 1969.